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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/575,909      | 04/13/2006  | Philippe Noelle      | H0004872-2930       | 5094             |

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HONEYWELL/GRIECCI

Patent Services

101 Columbia Road

P.O.Box 2245

Morristown, NJ 07962

EXAMINER

BASKIN, JEREMY S

ART UNIT

PAPER NUMBER

3753

NOTIFICATION DATE

DELIVERY MODE

05/13/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chris.james@honeywell.com

patentservices-us@honeywell.com

pto@griecci.com

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/575,909 | <b>Applicant(s)</b><br>NOELLE, PHILIPPE |  |
|                              | <b>Examiner</b><br>Jeremy S. Baskin  | <b>Art Unit</b><br>3753                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-10 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jamison (4,517,803) in view Jespersen (3,695,577).

In regard to Claim 4, Jamison teaches a turbocharger 10 comprising a housing 16, 26, 36 forming an opening at 24 configured to place a compressor outlet 20 in fluid communication with a compressor inlet 18. A valve member 56 is received in the opening and is configured to regulate the fluid flow through the opening by moving between a closed position (Figure 1) that fully obstructs the opening and an open position that does not fully obstruct the opening (col. 5, lines 15-19). In Figure 3, a retainer 62, 66 has a distal end 62 received in the housing and a proximal end 66 forming a threaded shaft. A coil spring 60 has a proximal end attached to the valve member 56 via a second retainer 64. The spring 60 and retainer 62, 66 are configured to urge the valve member 56 from the open position to the closed position in Figure 3. Jamison fails to specifically teach where a central portion of the spring forms a first set of coils and where a distal end of the spring forms a second set of coils wherein the second set of coils is threadedly received on the threaded shaft of the retainer. Jamison fails to further teach where second set of coils are smaller in diameter than the first set of coils such that the first set of coils is not threadedly engaged the shaft of the retainer and that screwing the spring to adjust the position of

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the second set of coils on the shaft does not change the number of functionally active spring coils.

Jespersion teaches a spring biased adjustable valve. In Figure 1, Jespersen teaches where a central portion at 19 of a spring 19 forms a first set of coils and a distal end 18 of the spring forms a second set of coils. The second set of coils 18 are threadedly received on a threaded shaft 17 of a retainer 6, 15 and the second set of coils are smaller in diameter than the first set of coils such that the first set of coils at 36 are not threadedly engaged the shaft of the retainer thereby allowing for axial motion (col. 3, lines 45-53). Screwing the spring 19 to adjust the position of the second set of coils on the shaft does not change the number of functionally active spring coils at 19 due to the second set of smaller diameter spring coils.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate, in Jamison, a threaded engagement between the shaft retainer and spring, as taught by Jespersen, so as to adjust the position of the spring relative to the retainer.

3. Claims 5-10 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jamison in view of Jespersen, as applied to Claim 4 above, and further in view of Hansen et al. (2,725,076).

In regard to Claims 5, 8-10, 12, 13, and 15-17, Jamison teaches where a flange at 22 is configured to abut a perimeter of the opening 24 with the valve member in the closed position and where the valve member 48 is a piston-like portion, but fails to specifically teach where the valve member extends through the opening and wherein the spring is configured in tension to hold the valve member in the closed position via a threaded connection between the spring and valve member and where the retainer is threaded into a blind hole in the valve body.

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Hansen discloses a spring biased valve. In Figure 1, Hansen teaches where a piston-like valve 21 extends through an opening 5 and is held in the closed position by a spring 36 in tension to hold the valve member in the closed position (col. 2, lines 3-11). The spring 35 is threaded onto a retainer 33 at reduced diameter spring coils 43 whereby the retainer is threadedly received in a threaded blind hole 39 in the valve body 1. The proximal end 42 of the coil spring is threadedly received and fixedly fitted on the valve member at 25.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate, in Jamison, a tension spring biasing the valve member in the closed position, as taught by Hansen, so as to retain the spring within the fluid flow of the turbine outlet thereby reducing the outer dimensions of the turbocharger.

In regard to Claims 6, 7, and 14, Jamison teaches where a diaphragm 48 of the valve member 56 forms a channel at 34 around the valve member in Figure 3. The channel is in fluid communication with the compressor outlet 20. When the valve member is in the open position, the diaphragm 48 defines a portion of a passageway along 22 connecting the outlet 20 to the opening 24 and compressor inlet 18. As such, pressure from the compressor outlet urges the valve member from the closed to the open position. A cover 36 of the housing is sealed over the valve member 56 and diaphragm 48 such that the cover forms a chamber 54 on the opposite side of the diaphragm from the channel 34. The cover forms a chamber inlet 40 for connection to a vacuum source 44. The diaphragm 48 and valve member 56 are configured such that the chamber 54 is isolated from fluid communication with the channel such that the vacuum source 44 is able to urge the valve towards the open position.

***Response to Arguments***

4. In the instant Office action, Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jamison (4,517,803) in view of Jespersen (3,695,577). Claims 5-10 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jamison in view of Jespersen, as applied to Claim 4, and further in view of Hansen et al. (2,725,076)

5. Applicant's arguments with regard to the rejection of Claim 12 as being rejected under 35 U.S.C. 112 2nd paragraph have been considered and are persuasive in light of the amendment to the preamble of Claim 12 (see Remarks, page 13, para. 4). The claim now clearly sets forth where a compressor inlet and compressor outlet are arranged in relation to an opening whereby the opening is recited within the body of the claim. As such, a compressor and compressor housing are necessarily required by the claim.

6. Applicant's amendments involving the compressor inlet and compressor outlet in relation to an opening along with the coil spring in tension necessitated the combination of Jamison in view of Jespersen further in view of Hansen. Hansen teaches where it is known to bias a valve in the closed position using a tension spring with the tension spring and retainer in the compressor flow path. Therefore, Applicant's arguments with regard to Benson (5,673,559) in view of Smith (1,026,472) have been considered, but are moot in view of the new grounds of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy S. Baskin whose telephone number is (571) 270-7421. The examiner can normally be reached on Monday through Friday, 7:30AM to 5:00PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Rivell/  
Primary Examiner, Art Unit 3753

/J. S. B./  
Examiner, Art Unit 3753